

What is claimed is:

1. A method for treating a disease in a mammal associated with undesirable activity or expression of ICT1030 peptide, comprising applying a composition that interacts with the ICT1030 peptide or gene, wherein the composition is capable of enhancing expression or activity of the ICT1030 when introduced into a tissue of the mammal.
2. The method according to claim 1, wherein the disease is cancer or a precancerous growth.
3. The method according to claim 1, wherein the tissue is a breast tissue, a colon tissue, a prostate tissue, a skin tissue, a bone tissue, a parotid gland tissue, a pancreatic tissue, a kidney tissue, a uterine cervix tissue, a lymph node tissue, or an ovarian tissue.
4. The method according to claim 1 wherein the composition is a nucleic acid.
5. The method according to claim 4, wherein the nucleic acid is a decoy molecule, a decoy DNA, a double stranded DNA, a single-stranded DNA, a complexed DNA, an encapsulated DNA, a viral DNA, a plasmid DNA, a naked RNA, an encapsulated RNA, a viral RNA, a double stranded RNA, a molecule capable of enhancing expression of the target ICTE1030 gene, or combinations thereof.
6. The method according to claim 4, wherein the nucleic acid molecule is substantially double stranded and has a length of about one hundred base pairs or less.
7. The method according to claim 4, wherein the nucleic acid composition comprises a siRNA, an RNAi or an shRNA or a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA.
8. The method according to claim 4, wherein the nucleic acid composition is a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA, and wherein the nucleic acid molecule is a plasmid, cosmid, bacteriophage, or viral vector.
9. The method according to claim 8, wherein the vector is a retroviral or adenoviral vector.
10. The method according to claim 4, wherein the nucleic acid composition comprises at least one molecule selected from the group consisting of an siRNA, an RNAi, and an shRNA, and wherein the molecule enhances expression of the target ICTE1030 gene in the mammal.
11. The method according to claim 1, wherein the mammal is a human.
12. The method according to claim 4, wherein the nucleic acid forms a triple helix with the target ICTE1030 gene-encoding nucleic acid.

13. The method of claim 1, wherein the target ICT1030 gene comprises a polynucleotide selected from the group consisting of:
  - (a) a polynucleotide encoding the polypeptide set forth in SEQ ID NO:2;
  - (b) a polynucleotide set forth in SEQ ID NO:1 or SEQ ID NO:3; and
  - (c) a polynucleotide having at least about 90% sequence identity to the polynucleotide of (a) or (b).
14. The method of claim 1, wherein the target ICT1030 gene comprises a polynucleotide having at least about 90% sequence identity to SEQ ID NO:1 or SEQ ID NO:3.
15. The method of claim 1, wherein the target ICT1030 gene comprises a polynucleotide having at least about 90% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:2.
16. The method of claim 1, wherein the target ICT1030 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:2.
17. The method of claim 1, wherein the target ICT1030 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide set forth in SEQ ID NO:2.
18. The method according to claim 13, wherein the nucleic acid molecule is substantially double stranded and has a length of about one hundred base pairs or less.
19. The method according to claim 13, wherein the nucleic acid composition comprises a siRNA, an RNAi or an shRNA or a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA.
20. The method according to claim 19, wherein the nucleic acid composition is a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA, and wherein the nucleic acid molecule is a plasmid, cosmid, bacteriophage, or viral vector.
21. The method according to claim 20, wherein the vector is a retroviral or adenoviral vector.
22. A method of administering nucleic acid to a patient in need thereof, wherein the nucleic acid molecule is delivered in the form of a naked oligonucleotide or a vector, wherein the nucleic acid interacts with the target ICT1030 gene.
23. The method of claim 22, wherein the nucleic acid is delivered as a vector, wherein the vector is a plasmid, cosmid, bacteriophage, or a virus.

24. The method of claim 23, wherein the vector is a retrovirus or an adenovirus based vector.
25. The method of claim 22, wherein the nucleic acid enhances the target ICT1030 gene expression in a mammalian cell.
26. The method of claim 22, wherein the cell is a human cell.
27. The method of claim 1 wherein the composition is the ICT1030 polypeptide set forth in SEQ ID NO:2 or a polypeptide having at least 90% sequence identity to the polypeptide of SEQ ID NO:2 and the biological activity of the ICT 1030 polypeptide.
28. The method of claim 1 wherein the composition is an antibody specific for the ICT1030 polypeptide set forth in SEQ ID NO:2 or a polypeptide having having at least 90% sequence identity to the polypeptide of SEQ ID NO:2.
29. A method for inhibiting cancer or precancerous growth in a mammalian tissue, comprising contacting the tissue with an enhancer that interacts with the target ICT1030 and thereby enhances the target ICT1030 expression or activity.
30. The method according to claim 29, wherein the tissue is a breast tissue, colon tissue, a prostate tissue, a skin tissue, a bone tissue, a parotid gland tissue, a pancreatic tissue, a kidney tissue, a uterine cervix tissue, a lymph node tissue, or an ovarian tissue.
31. The method according to claim 29, wherein the composition comprises a nucleic acid selected from the group consisting of an siRNA, an RNAi, and an shRNA, and wherein the molecule enhances expression of the target ICT1030 gene in the mammal.
32. The method according to claim 29, wherein the mammal is a human.
33. A method for treating a disease in a mammal associated with undesirable expression or activity of ICT1031, ICT1024, ICT 1025, or ICT1003 peptide, comprising applying a composition containing an inhibitor that interacts with the ICT1031 ICT1024, ICT 1025, or ICT1003 peptide or DNA or RNA, wherein the composition is capable of reducing expression or activity of the ICT1031, ICT1024, ICT 1025, or ICT1003 peptide when introduced into a tissue of the mammal.
34. The method according to claim 33, wherein the disease is cancer or a precancerous growth.
35. The method according to claim 33, wherein the tissue is a breast tissue, a colon tissue, a prostate tissue, a skin tissue, a bone tissue, a parotid gland tissue, a pancreatic tissue, a kidney tissue, a uterine cervix tissue, a lymph node tissue, or an ovarian tissue.
36. The method according to claim 33, wherein the composition is nucleic acid.

37. The method according to claim 36, wherein the inhibitor is a siRNA, an RNAi, a shRNA, an antisense RNA, an antisense DNA, a decoy molecule, a decoy DNA, a double stranded DNA, a single-stranded DNA, a complexed DNA, an encapsulated DNA, a viral DNA, a plasmid DNA, a naked RNA, an encapsulated RNA, a viral RNA, a double stranded RNA, a molecule capable of generating RNA interference, or combinations thereof.
38. The method according to claim 36, wherein the nucleic acid molecule is substantially double stranded and has a length of about one hundred base pairs or less.
39. The method according to claim 38, wherein the nucleic acid composition comprises a siRNA, an RNAi or an shRNA or a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA.
40. The method according to claim 39, wherein the nucleic acid composition is a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA, and wherein the nucleic acid molecule is a plasmid, cosmid, bacteriophage, or viral vector.
41. The method according to claim 40, wherein the vector is a retroviral or adenoviral vector.
42. The method according to claim 36, wherein the nucleic acid composition comprises at least one molecule selected from the group consisting of an siRNA, an RNAi, and an shRNA, and wherein the molecule causes post-transcriptional silencing of the target ICT1031, ICT1024, ICT 1025, or ICT1003 gene in the mammal.
43. The method according to claim 33, wherein the mammal is a human.
44. The method according to claim 36, wherein the inhibitor forms a triple helix with a target ICT1031-encoding nucleic acid.
45. The method of claim 33, wherein the target ICT1031 gene comprises a polynucleotide selected from the group consisting of:
- (a) a polynucleotide encoding the polypeptide set forth in SEQ ID NO:5;
  - (b) a polynucleotide set forth in SEQ ID NO:4; and
  - (c) a polynucleotide having at least about 90% sequence identity to the polynucleotide of a) or b).
46. The method of claim 45, wherein the target ICT1031 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:5.
47. The method of claim 45, wherein the target ICT1031 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide set forth in SEQ ID NO:4.

48. The method of claim 33, wherein the target ICT1003 gene comprises a polynucleotide selected from the group consisting of:
- (a) a polynucleotide encoding the polypeptide set forth in SEQ ID NO:7;
  - (b) a polynucleotide set forth in SEQ ID NO:6 or SEQ ID NO:8; and
  - (c) a polynucleotide having at least about 90% sequence identity to the polynucleotide of a) or b).
49. The method of claim 48, wherein the target ICT1003 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:7.
50. The method of claim 48, wherein the target ICT1003 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide set forth in SEQ ID NO:8.
51. The method of claim 33, wherein the target ICT1024 gene comprises a polynucleotide selected from the group consisting of:
- (a) a polynucleotide encoding the polypeptide set forth in SEQ ID NO:37;
  - (b) a polynucleotide set forth in SEQ ID NOs: 58, 60, 61, 62, 64, 66, 68 or 69; and
  - (c) a polynucleotide having at least about 90% sequence identity to the polynucleotide of a) or b).
52. The method of claim 51, wherein the target ICT1024 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:37.
53. The method of claim 51, wherein the target ICT1024 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide set forth in SEQ ID NOs. 58, 60, 61, 62, 64, 66, 68 or 69.
54. The method of claim 33, wherein the target ICT1025 gene comprises a polynucleotide selected from the group consisting of:
- (a) a polynucleotide encoding the polypeptide set forth in SEQ ID NO:71;
  - (b) a polynucleotide set forth in SEQ ID NO: 70; and
  - (c) a polynucleotide having at least about 90% sequence identity to the polynucleotide of a) or b).
55. The method of claim 54, wherein the target ICT1025 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide encoding the polypeptide as set forth in SEQ ID NO:70.

56. The method of claim 54, wherein the target ICT1025 gene comprises a polynucleotide having at least about 95% sequence identity to a polynucleotide set forth in SEQ ID NO:71.
57. A method for inhibiting cancer or precancerous growth in a mammalian tissue, comprising contacting the tissue with an inhibitor that interacts with a target ICT1031, ICT1024, ICT 1025, or ICT1003 DNA or RNA and thereby reduces target ICT1031, ICT1024, ICT 1025, or ICT1003 gene expression.
58. The method according to claim 57, wherein the tissue is a breast tissue, colon tissue, a prostate tissue, a skin tissue, a bone tissue, a parotid gland tissue, a pancreatic tissue, a kidney tissue, a uterine cervix tissue, a lymph node tissue, or an ovarian tissue.
59. The method according to claim 57, wherein the inhibitor is a siRNA, an RNAi, a shRNA, an antisense RNA, an antisense DNA, a decoy molecule, a decoy DNA, a double stranded DNA, a single-stranded DNA, a complexed DNA, an encapsulated DNA, a viral DNA, a plasmid DNA, a naked RNA, an encapsulated RNA, a viral RNA, a double stranded RNA, a molecule capable of generating RNA interference, or combinations thereof.
60. The method according to claim 57, wherein the nucleic acid molecule is substantially double stranded and has a length of about one hundred base pairs or less.
61. The method according to claim 57, wherein the nucleic acid composition comprises a siRNA, an RNAi or an shRNA or a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA.
62. The method according to claim 57, wherein the nucleic acid composition is a nucleic acid molecule capable of encoding a siRNA, an RNAi or an shRNA, and wherein the nucleic acid molecule is a plasmid, cosmid, bacteriophage, or viral vector.
63. The method according to claim 62, wherein the vector is a retroviral or adenoviral vector.
64. The method according to claim 57, wherein the nucleic acid composition comprises at least one molecule selected from the group consisting of an siRNA, an RNAi, and an shRNA, and wherein the molecule causes post-transcriptional silencing of the target ICT1031, ICT1024, ICT 1025, or ICT1003 gene in the mammal.
65. The method according to claim 57, wherein the mammal is a human.
66. The method according to claim 57, wherein the inhibitor forms a triple helix with a target ICT1031, ICT1024, ICT 1025, or ICT1003-encoding nucleic acid.
67. The method of administering siRNA to a patient in need thereof, wherein the siRNA molecule is delivered in the form of a naked oligonucleotide or a vector, wherein the

siRNA interacts with a target ICT1031, ICT1024, ICT 1025, or ICT1003 gene or a target ICT1031, ICT1024, ICT 1025, or ICT1003 mRNA transcript.

68. The method of claim 67, wherein the siRNA is delivered as a vector, wherein the vector is a plasmid, cosmid, bacteriophage, or a virus.

69. The method of claim 68, wherein the vector is a retrovirus or an adenovirus based vector.

70. A method of blocking in vivo expression of a target ICT1031, ICT1024, ICT 1025, or ICT1003 gene by administering a vector to a patient in need thereof, wherein the vector containing a target ICT1031, ICT1024, ICT 1025, or ICT1003 siRNA.

71. The method of claim 70, wherein the siRNA interferes with target ICT1031, ICT1024, ICT 1025, or ICT1003 gene expression.

72. The method of claim 71, wherein the siRNA causes post-transcriptional silencing of the target ICT1031, ICT1024, ICT 1025, or ICT1003 gene in a mammalian cell.

73. The method of claim 72, wherein the cell is a human cell.